ASAP Sup 24/06

Quality Control

Work Ord April-22-13 1:0		0341		*100	1341*						Page 1
Item ID: Revision ID:	D3953-19		en e	Accept	*N900	040	100)* s	etup Star	1.71	S1*
Item Name:	Gas Spring B	racket							Stop	, *N	S2*
Start Date: Required Date: Reference:	4/22/13 : 5/03/13	Start Qty: 30 Req'd Qty: 30			Cust Item I Customer:	ID:					
Approvals:		an: _MC5_		Yooling: SPC (Y/N):	:	ate:		R	tun Star Stop	, "I V I	R1* R2*
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr	;	The second secon	· i,						
D3953	С				1						
100 *100 Waterjet		Memo		0.00	1			30	Ó		Jm13-6-18
FLOW CNC Waterj			as per Dwg D3953 ev:		:						
		2-Debu	urr if necessary						c		,
*110 *110*		QC2- Inspect parts	off machine FAI/FAIB	0.00				30	0		Jm13-6-18

NCR: Y	es / No				WORK ORDER NON-O	CONF	ORN	MANCE / UPI	DATE			
									<u></u>	QA Closed:	Date:	
Work Orde	ř:				DISPOSITION	_				EPARTMENT,	_	
					Rework]	:	Skid-tube	Crosstube		Water Jet	Engineering
Part N	o				Scrap]]		/lachining	Small Fab	-4	d. Eng. Coor.	Quality
					Use-as-is	T		oforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	o				Work Order Update]		Large Fab	Composite		Supplier	
Root				Descri	ption of work order update	Initi	ial	Act	ion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chief	Eng	Descr	ription	Date	Verification	QC Inspector
Ooc/Data												
quip/Tooling												
Operator												
/laterial [ı					
etup		İ							•			
Other			1 1									
rocess]				1					
upplier												
raining												
Inapproved												
					F	AULT C	CATE	ORY				-
Landin	g Gear				General	_			_	_		,
	Bending			ļ	Bend	∐Gr	rain		· <u>L</u>	Ovalized		Pressure/Forced
. [Centre N	ot Conce	ntric to (o/s	BOM/Route	На	ırdwaı	re		Over/Under	tolerance	Temperature/Cure
	Cracks			•	Broken/Damaged	Ins	spection	on Incomplete		Part Incorre	ct	Weld
[Crushed/	Crimped			Burrs	Ins	structi	ons Incomplete/U	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs	•			Contamination	M	ainte	nance		Part Moved		
	Heat Trea	at			Countersink	Мі	islabel	led		Positioned V	_	
	Inspectio	n Strip in	Tube		Cut Too Short	Mi	isread			Power Loss/	Surge	Other
. [Ripples in	n Bend			Drill Holes	Of	fset					
Ţ	Torque V	Vaves in I	Extrusion	n ' [.]Ou	at of C	alibration				
Ī	Turning S	Sequence			Finish	Ou	ut of S	equence				
	Wave/Tv	vist in Tul	be		Folio	Ou	utside	Dimensions				

Date:

Wave/Twist in Tube

Work Orde		00341		*100	7341*				Page 2
Item ID: Revision ID: Item Name:	D3953-19 Gas Spring B	racket		Accept	*N900	<u>0401</u>	೧ ೧*	Setup Start Stop	*NS1* *NS2*
Start Date: Required Date: Reference:	4/22/13 : 5/03/13	Start Qty: 30.00 Req'd Qty: 30.00	*3(*3(Cust Item I Customer:	ID:			
Approvals:	Process Pla	an:	Date:		*	ate:		Run Start Stop	"NR1"
Sequence ID/ Work Center II 120 *170* QC Quality Control	D	Operation Description QC8- Inspect parts - seco	and check	Set Up/ Run Hours 0.00 Sk 0.00 /3-6			Plan Accep Code Qty Column		Reject Insp. Number Stamp
*130 *130* Small Fab Small Fab		•	, ER HOLE AS PER E R IF NECESSARY	0.00 0.00 0WG			30	×	
140 *1 4 0* QC	·	QC5- Inspect part comple		0.00 SM	<i>2</i> 0		30		

Quality Control

NCR:	Yes	•	NIO
NUK:	162	,	INO

		ř				•				DQA:	Date	: ••
NCR: Ye	es / No				WORK ORI	DER NON-C	ONFOR	MANCE / UP	DATE			
										QA Closed:	Date	· ·
Work Order	:				DISPO	SITION			AGAINST DE	PARTMENT	/PROCESS	
Part No						Rework Scrap Use-as-is	1 1	Skid-tube Machining moforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR No)		•		Work Ord	er Update	lileit	Large Fab	Composite]	Supplier	
Root				Desc	cription of work or	der update	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty		or Non-conform	ance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Ooc/Data quip/Tooling Operator					·				·			
Material Setup Other			ŕ									
Process Supplier											·	
raining											,	
Inapproved		1	<u> </u>	<u>.</u>		F	AULT CATE	GORY			<u> </u>	
Landin	g Gear				Gener		1021 01112					
	Bending				Bend		Grain			Ovalized		Pressure/Forced
<u> </u>	Centre No	ot Conce	ntric to	o/s	BOM/Route	•	Hardw			Over/Under	<u> </u>	Temperature/Cure
	Cracks			,	Broken/Damag	ged	-	ion Incomplete	-	Part Incorre	<u> </u>	Weld
	Crushed/	Crimped			Burrs		\vdash	tions Incomplete/	Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs			•	Contamination		\vdash	enance	\vdash	Part Moved	Mrong	
-	Heat Trea		Tulba		Countersink		Mislab Misrea		-	Positioned V Power Loss/		Other
-	Inspection Ripples in		iupe		Cut Too Short Drill Holes		Offset	u	L_	Tuomer rossy	Juige [Journal
-	Torque W		vtrució	, I	Drawing		⊢	Calibration				
<u> </u>	Turning S			''	Finish		\vdash	Sequence				
-	Wave/Tw				Folio		├ ──	e Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

QC

Quality Control

100341 Page 3 April-22-13 1:02:06 PM D3953-19 Accept *N900040100* Item ID: Setup Start **Revision ID:** Stop Gas Spring Bracket Item Name: **Start Date:** 4/22/13 **Start Qty: 30.00 Cust Item ID:** Req'd Qty: 30.00 Required Date: 5/03/13 **Customer:** Reference: Run Start Process Plan: Date: **Tooling:** Date: **Approvals:** Stop Date: SPC (Y/N): QC: Date: Sequence ID/ Tool ID Reject Operation Set Up/ Tool # Plan Accept Reject Insp. **Work Center ID** Description Code Oty Qty-Number Stamp **Run Hours** Identify as per dwg & Stock Location: 150 *150* Packaging 0.00 Memo Packaging 160 QC21- Final Inspection - Work Order Release 0.00 *160*

0.00

Memo

MR our

NCR:	Yes	/	No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

NCR: YE	es / No				WORK ORDER NON-	CONTON	VIANCE / OPD		QA Closed:	Date:	
Work Order	֥				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No					Rework Scrap	- I	Skid-tube Machining	Crosstube Small Fab		Water Jet	Engineering Quality
NCR No	o				Use-as-is Work Order Update	Therr	noforming Large Fab	Finishing Composite	Rec/Stoi	e/Packaging Supplier	Other
Root				Descr	iption of work order update	Initial	Actio	on	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Descrip	ption	Date	Verification	QC Inspector
Ooc/Data											
quip/Tooling											
Operator											
Material											
etup	_]·	•						
Other											
Process	_										
Supplier	_		,		•						
raining	_										
Jnapproved	<u>. J </u>	<u> </u>					L		·		
: 						AULT CATE	GORY				
Landin					General				i		٦
·	Bending		<i>:.</i>		Bend	Grain		├ ──	Ovalized	. —	Pressure/Forced
		ot Conce	ntric to	o/s	BOM/Route	Hardwa			Over/Under	-	Temperature/Cure
	Cracks	٠.			Broken/Damaged	-	ion Incomplete	 	Part Incorred	_	Weld
_		Crimped			Burrs	\blacksquare	tions Incomplete/Ur		Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs	•			Contamination	\rightarrow	enance		Part Moved		
·	Heat Tre	at			Countersink	Mislab		<u> </u>	Positioned V		ا .
	Inspection	on Strip in	Tube	L	Cut Too Short	Misrea	d		Power Loss/	Surge	Other
[Ripples i	n Bend			Drill Holes	Offset					
	Torque V	Vaves in I	Extrusio	n [_	Drawing		Calibration				
	Turning :	Sequence		. [Finish	Out of	Sequence				
	Wave/Tv	vist in Tu	be		Folio	Outside	e Dimensions				

April-22-13 1:02:05 PM

Work Order ID:

100341

Parent Item:

D3953-19

Parent Item Name:

Gas Spring Bracket

Start Date: 4/22/13

Required Date: 5/03/13

Start Qty: 30.00

Required Qty: 30.00

Comments:

IPP RevA: new issue DD 09.11.30 verified by:EC verified by:EC

IPP Rev:B as per dwg revC DD 10.03.02

	vernied by.EC													
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
M304S11GA		Purchased	No			100	sf	199.0300	0.018	D.568422	-	To	13-6-	-19
	Component Item ID/ Item Name	Component Item ID/ Replacement Item Name Item ID M304S11GA	Component Item ID/ Replacement Mfg/ Item Name Item ID Purch M304S11GA Purchased	Component Item ID/ Replacement Mfg/ Bin Item Name Item ID Purch Item M304S11GA Purchased No	Component Item ID/ Replacement Mfg/ Bin Primary Item Name Item ID Purch Item Location M304S11GA Purchased No	Component Item ID/ Replacement Item ID/ Purch Item Location Location M304S11GA Replacement Mfg/ Bin Primary Last Location Purch Item Location No	Component Item ID/ Replacement Item ID Purch Item Location Route Location Seq ID M304S11GA Replacement Mfg/ Bin Primary Last Route Location Seq ID	Component Item ID/ Replacement Item ID Purch Item Location Location Route Location Measure M304S11GA Replacement Item ID Purch Item Location Location Seq ID Measure No 100 sf	Component Item ID/ Replacement Item ID Purch Item Location Location Route Seq ID Measure Hand M304S11GA Purchased No 100 sf 199.0300	Component Item ID/ Replacement Item ID/ Replacement Item ID Purch Item Location Location Route Seq ID Measure Hand M304S11GA Purchased No 100 sf 199.0300 0.018	Component Item ID/ Replacement Item ID/ Replacement Item ID Purch Item Location Location Route Seq ID Measure Hand Qty on Qty per Kit Total Qty M304S11GA Purchased No 100 sf 199.0300 0.018 0.568422	Component Item ID/ Replacement Item ID/ Replacement Item ID Purch Item Location Location Route Location Seq ID Measure Hand Coty Item Item ID Purch Item ID No Item Location Seq ID Seq ID No Item Item ID Item Location Item Item ID Item Item Item Item ID Item Item Item Item Item Item Item Item	Component Item ID/ Replacement Item ID/ Replacement Item ID Purch Item Location Location Route Seq ID Measure Hand Qty Issued Issued M304S11GA No 100 sf 199.0300 0.018 0.568422	Component Item ID/ Replacement Item ID/ Replacement Item ID Purch Item Location Location Route Seq ID Measure Hand Qty Issued Issued M304S11GA Purchased No 100 sf 199.0300 0.018 0.568422

<u>Location</u>	Loc Oty	Loc Code
MAT020	199.03	
122521	24.93	
124445	174.1	
	,	

NCR:	Vac		No
NUK:	Yes	,	INO

Date:

NCR: Y	es / No				WORK ORDER NON-	CONFO	RMANCE / U	PDATE	QA Closed:	Date:	<u>.</u>
Work Orde	r.				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N				·	Rework Scrap		Skid-tube Machining	Crosstube Small Fab	-	Water Jet d. Eng. Coor.	Engineering Quality
NCR N	o				Use-as-is Work Order Update	The	ermoforming Large Fab	Finishing Composite	Rec/Stor	re/Packaging Supplier	Other
Root				Descr	iption of work order update	Initia	1	Action	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief E	ng De	scription	Date	Verification	QC Inspector
Ooc/Data		ł									
quip/Tooling				ĺ.							
Operator			,								
Material											
ietup											
Other]
rocess		1				1					
Supplier											
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Jnapproved		<u> </u>	<u> </u>								
					F	AULT CA	TEGORY				
Landir	g Gear				General	_		_	-	_	-
	Bending				Bend	Grai	n ·	·	Ovalized		Pressure/Forced
· [Centre N	ot Conce	ntric to	o/s	BOM/Route	Hard	lware		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Insp	ection Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped			Burrs	Instr	uctions Incomplet	:e/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
·	Cuffs				Contamination	Mai	ntenance		Part Moved		
Ī	Heat Tre	at			Countersink	Misl	abeled	´	Positioned V	Vrong	_
.]	Inspection	n Strip in	Tube		Cut Too Short	Misr	ead	<u>.</u>	Power Loss/	Surge	Other
	Ripples in			-	Drill Holes	Offs	et				
ļ	Torque V		Extrusio	n	Drawing	Out	of Calibration				
<u> </u>	Turning S				Finish	Out	of Sequence		-		
	Wave/Tv				Folio	Outs	ide Dimensions				

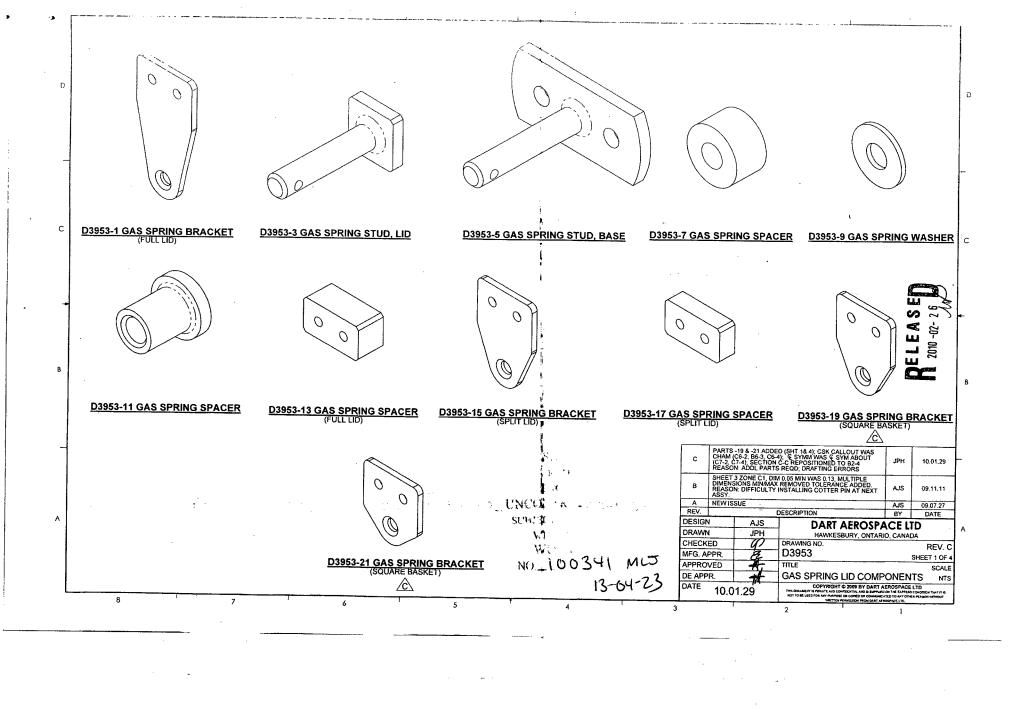
DART AEROSPACE LTD	Work Order:	100341
Description: Gas Spring Bracket	Part Number:	. D3953-19
Inspection Dwg: D3953 Rev: C		Page 1 of 1

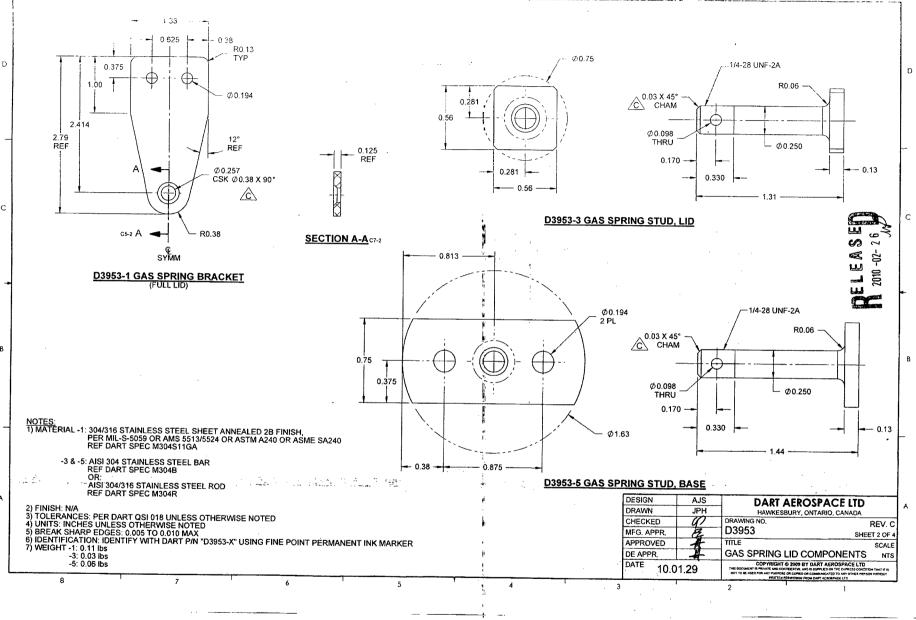
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.194	+0.005/-0.001	0.194"	_		V	Ilonoi
Ø0.257	+0.006/-0.001	0.362,	-		V	
0.38	+/-0.030	6.378"	_		V	
1.38	+/-0.030	1.382	-		· V	
0.625	+/-0.010	0.625"	_		Ù	
0.375	+/-0.010	0.378	~		Ú	
1.00	+/-0.030	1.00"	_		'V	
1.500	+/-0.010	1.508"	-		V.	-
1.88	+/-0.030	1. පිහිප	_		V	
0.125	+/-0.010	O.117"	-		V:	
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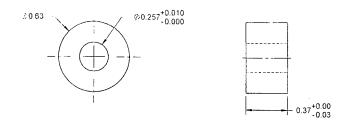
	·	,		. , 4	
Measured by:	Jm	Audited by:	5mb	Preliminary Approval:	
Date:	13-6-18	Date:	13-6-19	Date:	

Rev	Date	Change	Revised b	٧	Approved
Α	10.03.31	New Issue	KJ	.)	
В	11.01.17	Dimensions revised	KJ	*L	X
				77	





C



D3953-7 GAS SPRING SPACER

Ø0.257 CSK Ø0.32 X 90°

<u>@</u>



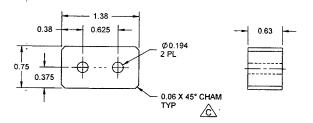
0.13 Ø0.257 REF

D3953-11 GAS SPRING SPACER

SECTION B-B B7-3

R0.03

MIN



D3953-13 GAS SPRING SPACER

DESIGN AJS		DART AEROSPACE LTD		
DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA		
CHECKED	a	DRAWING NO. RE	v.·c	
MFG. APPR.	E	D3953 SHEET 3	OF 4	
APPROVED	-		ALE	
DE APPR.		GAS SPRING LID COMPONENTS	NTS	
DATE 10.01.29		COPYRIGHT © 2009 BY DART AEROSPACE LTD THE DOCUMENT B PRIMATE AND CONFIDENTIAL AND IS SUPPLED ON THE EXPRESS CONSTITUTE TO NOT 10 SE UMED FOR ANY PUMPOSE ON CONFIDENCE TO TO ANY OTHER PRESIDENCE VICTORY.		

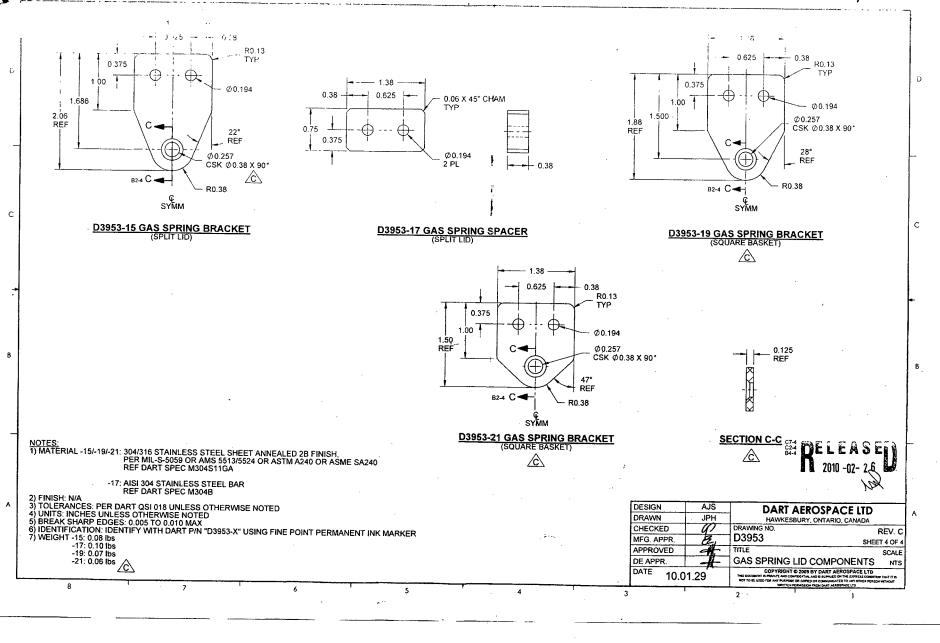
NOTES: 1) MATERIAL -7,-9 & -11: DELRIN II 150E OR ACETRON GP ACETAL, BLACK REF DART SPEC M-DELRIN-R

-13: AISI 304 STAINLESS STEEL BAR REF DART SPEC M304B

Ø0.44

Ø0.63

2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION -13 ONLY: IDENTIFY WITH DART P/N "D3953-13" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT -7/-9/-11: < 0.01 lbs EACH
-13: 0.17 lbs



1.7